INJURIES DURING THE COVID-19 PANDEMIC

THE FOLLOWING HAS BEEN PREPARED BY THE VICTORIAN INJURY SURVEILLANCE UNIT (VISU)
MONASH UNIVERSITY ACCIDENT RESEARCH CENTRE (MUARC)

MONTHLY BULLETIN – EDITION 5: JULY SUMMARY

ED presentations overall were 23% lower in July 2020 compared to July 2019

Population-based ED presentation rates decreased in July 2020 compared to July 2019:
Metro Vic: ↓28%
Regional Vic: ↓16%

Unintentional farm injury ED presentations increased in July 2020 (n=255) vs July 2019 (n=214)
Farm injury rates in regional Victoria ↑24%: 159 per 100,000 (July 2020) vs 128 per 100,000 (July 2019)

DIY (Do-it-yourself) ED presentations increased in July 2020 (n=240) compared to July 2019 (n=200); 65% were males aged 25-64 years

Transport injury ED presentation rates per 100,000 population:
Metro Vic: July 2020 (208 per 100,000) vs July 2019 (248 per 100,000)
Regional Vic: July 2020 (494 per 100,000) vs July 2019 (512 per 100,000)

Cycling ED presentations increased by 46%: July 2020 (n=456) vs July 2019 (n=313). Child (under 15 years) cycling injuries increased: 80 cases (July 2019) to 162 (July 2020)

Self-harm injury ED presentation rates per 100,000 population:
Metro Vic: July 2020 (115 per 100,000) vs July 2019 (84 per 100,000)
Regional Vic: July 2020 (268 per 100,000) vs July 2019 (269 per 100,000)

Assault (in the home) injury ED presentation rates per 100,000 population:
Metro Vic: July 2020 (22 per 100,000) vs July 2019 (21 per 100,000)
Regional Vic: July 2020 (52 per 100,000) vs July 2019 (35 per 100,000)

Injury and poisoning-related ED presentations overall were 19% lower in July 2020 compared to July 2019

Large ED reductions noted for injuries in:
1. Athletics & sports areas (↓83%)
2. Schools, daycare centres & public admin areas (↓45%)

Home injury ED presentation rates (population-based) remained stable in metropolitan Victoria in July 2020 compared to July 2019; in regional Victoria, ED presentation rates increased by 15%

Given the overall reduction in health service use through the ED in July 2020 compared to July 2019, the number of injuries presented in this bulletin are likely to represent a smaller proportion of total injuries than in the previous year.
BACKGROUND

In response to the global COVID-19 pandemic, Australia (including Victoria) has implemented physical distancing along with several other measures to limit transmission of the coronavirus. This monthly bulletin monitors injury rates related to the home (including DIY injuries), farm, transport, self-harm and assault during the COVID-19 pandemic. This bulletin is a special VISU initiative, in addition to the usual annual reporting; VISU intends to produce these reports throughout the duration of the pandemic. This fifth edition of the bulletin examines rates in Victoria during July 2020 relative to the same time last year.

In July, restrictions for metropolitan and regional Victoria differed in terms of implementation date and level; therefore, in this bulletin ED presentation rates have been provided by regionality. In order to provide context for this issue of the bulletin, an overview of restrictions imposed on Australians and Victorians, with key dates in chronological order, is provided in the Appendix section.

METHOD

Data used to compile this bulletin were extracted from the Victorian Emergency Minimum Dataset (VEMD), which holds deidentified clinical records of presentations at Victorian public hospitals with designated 24-hour emergency departments (EDs) (currently 38 hospitals). ED presentations from 1 March 2019 to 31 July 2020 were analysed for this bulletin. A detailed outline of the methods used for case selection are provided in the Appendix section of this report. For more information on methods used by the Victorian Injury Surveillance Unit see here and background information and pre-COVID statistics see here. Further information on geographical differences in injury ED presentations in Victoria can be found in VISU’s Hazard Edition No. 85.

KEY INJURY GROUPS

HOME  DIY  FARM  TRANSPORT  SELF-HARM  ASSAULT (home)
ED HEALTH SERVICE UTILISATION BEFORE THE CORONAVIRUS PANDEMIC AND DURING JULY 2020: THE FIFTH MONTH SINCE THE START OF RESTRICTIONS

ED presentations in Victoria decreased from 157,438 ED presentations in July 2019 to 121,138 in July 2020: a 23% reduction. This should be seen in context of a steady growth in ED presentations (3.6% per year), which was observed in recent years in Victoria. In metropolitan Victoria, age-standardised rates were 25,771 per 100,000 population per year in July 2019 vs 18,518 per 100,000 population per year in July 2020. In regional Victoria, age-standardised rates were 35,259 per 100,000 population per year in July 2019 vs 29,780 per 100,000 population per year in July 2020. Age-standardised ED presentation rates from previous months are included in the graph below for comparison purposes.

Data selection methods are explained in the Appendix section.
Respiratory illness or virus-related ED presentations:

- **Viral infection, unspecified**: 5,788 vs 2,566 (July 2019 vs July 2020)
- **Upper respiratory infection, unspecified**: 2,076 vs 948 (July 2019 vs July 2020)
- **Pneumonia (broncho- or lobar)**: 1,653 vs 760 (July 2019 vs July 2020)
- **Asthma**: 1,820 vs 718 (July 2019 vs July 2020)

Common ED presentations not related to viral or respiratory illness

- **Syncope/collapse**: 1,825 vs 1,420 (July 2019 vs July 2020)
- **Urinary tract infection**: 1,698 vs 1,352 (July 2019 vs July 2020)
- **Abdominal pain, unspecified**: 6,270 vs 5,904 (July 2019 vs July 2020)

Potentially life-threatening presentations not related to viral or respiratory illness

- **Myocardial infarction**: 702 vs 611 (July 2019 vs July 2020)
- **Angina pectoris**: 385 vs 287 (July 2019 vs July 2020)
- **Stroke**: 787 vs 684 (July 2019 vs July 2020)
- **Pulmonary embolism**: 218 vs 181 (July 2019 vs July 2020)
- **Appendicitis**: 645 vs 577 (July 2019 vs July 2020)
SUMMARY: EMERGENCY DEPARTMENT HEALTH SERVICE USE FINDINGS (VIC)

ED presentations overall decreased by 23% from 157,438 in July 2019 to 121,138 in July 2020

In metropolitan Victoria, age-standardised ED presentation rates decreased by 28%: 25,771 per 100,000 (July 2019) to 18,518 per 100,000 (July 2020)

In regional Victoria, age-standardised ED presentation rates decreased by 16%: 35,259 per 100,000 (July 2019) to 29,780 (July 2020)

In July 2020, ED service use for respiratory diseases overall was 63% lower compared to July 2019: upper respiratory infection (↓54%), asthma (↓61%) and pneumonia (↓54%)

In July 2020, ED presentations for potentially life-threatening conditions such as myocardial infarction/heart attack (↓13%) and stroke (↓13%) were lower compared to July 2019; appendicitis presentations were lower but not at a statistically significant level

ED presentations for injury & poisoning (overall, not limited to injury in the home) was 19% lower in July 2020 compared to July 2019

Major reductions in injury & poisoning cases occurred in:
- Athletics & sports areas (↓83%)
- Places for recreation (↓45%)
- Schools, daycare centres, public administration areas (↓45%)

Increases in injury and poisoning cases occurred in:
- Home locations (↑8%)
- Farm locations (↑19%)
The reduction in ED presentations, observed in both metropolitan and regional Victoria, potentially indicates missed opportunities for early treatment and intervention. In particular, the decrease in presentation of potentially life-threatening conditions that are unlikely to be directly affected by COVID-19, is of concern.

The profile of ED presentations may have been affected indirectly by the physical distancing measures: these may have reduced transmission of common cold and flu viruses. Whether this is the case, and to what extent this has affected rates of respiratory illness in Victoria, needs further investigation.

Non-urgent health issues may have been presented to the GP or Nurse on Call instead of the ED; this needs to be investigated further to identify potential gaps in service utilisation during the pandemic.

Differences in exposure in July 2020 compared to this period in 2019, in particular more time spent at home and less time spent in school and sporting areas, has had a pronounced effect on the profile of injuries presented to the ED.
• The total number of unintentional home injuries increased in July 2020 compared to July 2019; this increase was observed both in the number of ED presentations as well as in the number of cases proportional to ED caseload (only including cases that were not directly or indirectly related to viral or respiratory illness).

• Age-standardised unintentional home injury ED presentation rates remained stable (↑1%) in metropolitan Victoria in July 2020 (1556 per 100,000 population) vs July 2019 (1549 per 100,000 population). An increase of 15% was recorded for rates within regional Victoria (July 2020: 3081 per 100,000 vs July 2019: 2676 per 100,000).

• Both in July 2019 and in July 2020, falls were the most common cause of unintentional home injury and open wounds and fractures were the most common injury types.

• Given the overall reduction in health service utilisation through the ED (for non-viral or respiratory illness issues) in July 2020 vs July 2019, the number of home injuries presented in this bulletin are likely to represent a smaller proportion of total injuries than in the previous year.

Rates from previous months are included in the graph for comparison purposes. Data selection methods are explained in the Appendix section.

<table>
<thead>
<tr>
<th>Triage status</th>
<th>July 2019</th>
<th>July 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Injuries cases</td>
<td>ED Presentations*</td>
</tr>
<tr>
<td>Resuscitation</td>
<td>24</td>
<td>406</td>
</tr>
<tr>
<td>Emergency</td>
<td>629</td>
<td>7242</td>
</tr>
<tr>
<td>Urgent</td>
<td>2865</td>
<td>24913</td>
</tr>
<tr>
<td>Semi-urgent</td>
<td>5330</td>
<td>26198</td>
</tr>
<tr>
<td>Non-urgent</td>
<td>1233</td>
<td>4510</td>
</tr>
<tr>
<td>Total</td>
<td>10081</td>
<td>63269</td>
</tr>
</tbody>
</table>

*For VEMD caseload calculations, only ED presentations that were considered unlikely to be directly or indirectly related to the pandemic were included. (See Appendix for details).
DO-IT-YOURSELF (DIY) INJURY PRESENTATIONS TO THE ED

- Do-it-yourself injury case selection is based on text analysis of ED narrative information, and subject to data quality. Given these methodological limitations, the number of DIY injuries are likely to be underestimated by these statistics.

- The figure below lists the range of DIY injuries presenting to the ED in July 2020 compared with July 2019. There was an increase in DIY injuries presenting to the ED from 200 cases in July 2019 to 240 cases in July 2020 (20% increase).

- The most common DIY injury types in July 2020 were open wounds, foreign body injuries, superficial injuries, eye injuries and fractures. These injuries were commonly caused by powered tools such as grinders, powered saws and drills.

- The majority (65%) were males aged 25-64 years.

**Unintentional Home Injury: Ten Most Common DIY Injury Causes**

DIY case selection methods are explained in the Appendix section. Ladder falls (specifically) are not included as they were not in the top ten most common DIY injury causes.
The total number of unintentional farm injuries was higher in July 2020 than in July 2019; proportional to ED caseload (including only cases that were not directly or indirectly related to viral or respiratory illness), ED presentations for unintentional farm injury increased.

Comparing July 2019 to July 2020, age-standardised unintentional farm injury ED presentation rates in regional Victoria increased by 24% from 128 per 100,000 population to 159 per 100,000 population. Metropolitan rates of unintentional farm injury are not presented as these were relatively low, both in July 2019 and July 2020.

Given the overall reduction in health service utilisation through the ED (for non-viral or respiratory illness issues) in July 2020 vs July 2019, the number of farm injuries presented in this bulletin are likely to represent a smaller proportion of total injuries than in the previous year.

Unintentional Farm Injury ED Presentation Rate: Regional Victoria

Rates from previous months are included in the graph for comparison purposes. Data selection methods are explained in the Appendix section.

<table>
<thead>
<tr>
<th>Triage status</th>
<th>July 2019</th>
<th>July 2020</th>
<th>Change in case numbers</th>
<th>Change in ratios</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Injury cases</td>
<td>ED Presentations</td>
<td>Ratio</td>
<td>Injury cases</td>
</tr>
<tr>
<td>Resuscitation, Emergency</td>
<td>31</td>
<td>7648</td>
<td>0.004</td>
<td>48</td>
</tr>
<tr>
<td>Urgent</td>
<td>67</td>
<td>24913</td>
<td>0.003</td>
<td>85</td>
</tr>
<tr>
<td>Semi-urgent</td>
<td>99</td>
<td>26198</td>
<td>0.004</td>
<td>104</td>
</tr>
<tr>
<td>Non-urgent</td>
<td>17</td>
<td>4510</td>
<td>0.004</td>
<td>18</td>
</tr>
<tr>
<td>Total</td>
<td>214</td>
<td>63269</td>
<td>0.003</td>
<td>255</td>
</tr>
</tbody>
</table>

*For VEMD caseload calculations, only ED presentations that were considered unlikely to be directly or indirectly related to the pandemic were included. (See Appendix for details).
• The total number of ED presentations for transport injury was slightly lower in July 2020 than in July 2019, however, an increase was observed in transport injury cases proportional to ED caseload (including only cases that were not directly or indirectly related to viral or respiratory illness issues).

• Age-standardised transport injury ED rates in metropolitan Victoria were 248 and 208 annually per 100,000 population, in July 2019 and July 2020, respectively. In regional Victoria, age-standardised rates were 512 and 494 ED presentations annually per 100,000 population, in July 2019 and July 2020, respectively.

• Pedal cycle injuries increased from 313 in July 2019 to 456 in July 2020 (+46%) while motor vehicle injuries decreased from 904 in July 2019 to 574 in July 2020 (-36%).

• An increase in transport injuries was observed in children aged 0-14 years, from 192 cases in July 2019 to 278 cases in July 2020 (+45%).

• Given the overall reduction in health service utilisation through the ED (for non-viral or respiratory illness issues) in July 2020 vs July 2019, the number of transport injuries presented in this bulletin are likely to represent a smaller proportion of total injuries than in the previous year.

Rates from previous months are included in the graph for comparison purposes. Data selection methods are explained in the Appendix section.

<table>
<thead>
<tr>
<th>Triage status</th>
<th>Injury cases</th>
<th>ED Presentations*</th>
<th>Ratio</th>
<th>Injury cases</th>
<th>ED Presentations*</th>
<th>Ratio</th>
<th>Change in case numbers</th>
<th>Change in ratios</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resuscitation</td>
<td>30</td>
<td>406</td>
<td>0.074</td>
<td>34</td>
<td>361</td>
<td>0.094</td>
<td>+13%</td>
<td>+27%</td>
</tr>
<tr>
<td>Emergency</td>
<td>442</td>
<td>7242</td>
<td>0.061</td>
<td>399</td>
<td>6289</td>
<td>0.063</td>
<td>-10%</td>
<td>+4%</td>
</tr>
<tr>
<td>Urgent</td>
<td>750</td>
<td>24913</td>
<td>0.030</td>
<td>606</td>
<td>20104</td>
<td>0.030</td>
<td>-19%</td>
<td>+0%</td>
</tr>
<tr>
<td>Semi-urgent</td>
<td>462</td>
<td>26198</td>
<td>0.018</td>
<td>425</td>
<td>18084</td>
<td>0.024</td>
<td>-8%</td>
<td>+33%</td>
</tr>
<tr>
<td>Non-urgent</td>
<td>69</td>
<td>4510</td>
<td>0.015</td>
<td>48</td>
<td>2842</td>
<td>0.017</td>
<td>-30%</td>
<td>+10%</td>
</tr>
<tr>
<td>Total</td>
<td>1753</td>
<td>63269</td>
<td>0.028</td>
<td>1512</td>
<td>47680</td>
<td>0.032</td>
<td>-14%</td>
<td>+14%</td>
</tr>
</tbody>
</table>

*For VEMD caseload calculations, only ED presentations that were considered unlikely to be directly or indirectly related to the pandemic were included. (See Appendix for details).
• All self-harm injury presentations to the ED were included; this analysis was not limited to those that occurred in the home.

• The total number of ED presentations for self-harm injury was greater in July 2020 compared with July 2019; however, proportional to ED caseload (including only cases that were not directly or indirectly related to viral or respiratory illness), ED presentations for self-harm had also increased.

• Age-standardised self-harm injury rates in metropolitan Victoria were 84 and 115 ED presentations annually per 100,000 population, in July 2019 and July 2020, respectively. In regional Victoria, age-standardised rates were 269 and 268 ED presentations annually per 100,000 population, in July 2019 and July 2020, respectively.

• At both timepoints, the most common injury type was poisoning or toxic effects.

• Given the overall reduction in health service utilisation through the ED (for non-viral or respiratory illness issues) in July 2020 vs July 2019, the number of self-harm injuries presented in this bulletin are likely to represent a smaller proportion of total injuries than in the previous year.

<table>
<thead>
<tr>
<th>Triage status</th>
<th>Injury cases</th>
<th>ED Presentations*</th>
<th>Ratio</th>
<th>Injury cases</th>
<th>ED Presentations*</th>
<th>Ratio</th>
<th>Change in case numbers</th>
<th>Change in ratios</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resuscitation</td>
<td>30</td>
<td>406</td>
<td>0.074</td>
<td>41</td>
<td>361</td>
<td>0.114</td>
<td>+37%</td>
<td>+54%</td>
</tr>
<tr>
<td>Emergency</td>
<td>185</td>
<td>7242</td>
<td>0.026</td>
<td>225</td>
<td>6289</td>
<td>0.036</td>
<td>+22%</td>
<td>+40%</td>
</tr>
<tr>
<td>Urgent</td>
<td>327</td>
<td>24913</td>
<td>0.013</td>
<td>396</td>
<td>20104</td>
<td>0.020</td>
<td>+21%</td>
<td>+50%</td>
</tr>
<tr>
<td>Semi-urgent</td>
<td>114</td>
<td>26198</td>
<td>0.004</td>
<td>123</td>
<td>18084</td>
<td>0.007</td>
<td>+8%</td>
<td>+56%</td>
</tr>
<tr>
<td>Non-urgent</td>
<td>13</td>
<td>4510</td>
<td>0.003</td>
<td>13</td>
<td>2842</td>
<td>0.005</td>
<td>+0%</td>
<td>+59%</td>
</tr>
<tr>
<td>Total</td>
<td>669</td>
<td>63269</td>
<td>0.011</td>
<td>798</td>
<td>47680</td>
<td>0.017</td>
<td>+19%</td>
<td>+58%</td>
</tr>
</tbody>
</table>

*For VEMD caseload calculations, only ED presentations that were considered unlikely to be directly or indirectly related to the pandemic were included. (See Appendix for details).
The total number of ED presentations for assault-related injury that occurred in the home was higher in July 2020 than in July 2019; this increase was also observed in the number of cases proportional to ED caseload (including only cases that were not directly or indirectly related to viral or respiratory illness).

In July 2019 and July 2020, age-standardised assault (in the home) injury rates in metropolitan Victoria were 21 and 22 ED presentations annually per 100,000 population, respectively. In regional Victoria, in July 2019 and July 2020, age-standardised rates were 35 and 52 ED presentations annually per 100,000 population, respectively.

Given the overall reduction in health service utilisation through the ED (for non-viral or respiratory illness issues) in July 2020 vs July 2019, the number of assault-related home injuries presented in this bulletin are likely to represent a smaller proportion of total injuries than in the previous year.

- For VEMD caseload calculations, only ED presentations that were considered unlikely to be directly or indirectly related to the pandemic were included. (See Appendix for details).
Assault-Related Home Injury: Males

<table>
<thead>
<tr>
<th></th>
<th>0-24 years</th>
<th>25+ years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jul-19</td>
<td>23</td>
<td>46</td>
</tr>
<tr>
<td>Jul-20</td>
<td>10</td>
<td>58</td>
</tr>
</tbody>
</table>

Assault-Related Home Injury: Females

<table>
<thead>
<tr>
<th></th>
<th>0-24 years</th>
<th>25+ years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jul-19</td>
<td>15</td>
<td>56</td>
</tr>
<tr>
<td>Jul-20</td>
<td>25</td>
<td>67</td>
</tr>
</tbody>
</table>

Assault-Related Home Injury: Four Most Common Injury Types

- Other & unspecified injury: +15
- Open wound: -4
- Superficial injury: +10
- Fracture: -4
INJURY PREVENTION RESOURCES & SUPPORT SERVICES

INJURY PREVENTION RESOURCES

FAMILY VIOLENCE

MENTAL HEALTH AND SUICIDE PREVENTION

CHILD INJURY PREVENTION

FALLS PREVENTION

FARM SAFETY

SAFE CYCLING

ADDITIONAL SUPPORT SERVICES

MENTAL HEALTH AND SUICIDE SUPPORT

Victoria has a range of mental health support services that are available 24 hours a day, seven days a week. These services can provide treatment, information, tools and advice on how to deal with a range of mental health issues (Better Health Channel).

- Call Lifeline to anonymously and confidentially discuss any personal difficulties, including suicidal thoughts at any time. **Phone 13 11 14 (24/7)**. Lifeline text 0477 131 114 (6pm-midnight AEST, 7 days) and online chat service [https://www.lifeline.org.au/crisis-chat/](https://www.lifeline.org.au/crisis-chat/) (7pm-midnight AEST, 7 days).

- **Suicide Call Back Service** is a confidential 24-hour crisis support line available 24 hours a day, 7 days a week. **Phone 1300 659 467 (24 hours)**.

- **SuicideLine Victoria** is a free 24/7 telephone, video and online counselling service offering professional support to people at risk of suicide, people concerned about someone else’s risk of suicide, and people bereaved by suicide. **Phone 1300 651 251 (24 hours)**.

- **SANE Australia** helps people affected by mental illness to lead a better life. **Phone 1800 187 263 (Monday to Friday, 10am - 10pm AEST)**.
• **Beyond Blue** provides information and support to help everyone achieve their best possible mental health, whatever their age and wherever they live. Phone **1300 224 636 (24/7)**, chat online 3pm to 12am (AEST) 7 days a week, or online forums (24/7).

• **GriefLine** is a free national counselling and support telephone, SMS and video service, offering confidential 7 days a week phone and telehealth counselling and support to people experiencing grief, loss and/or trauma. In Victoria: Phone **03 9935 7400 (6am – 2am, 7 days).**

• **Kids Helpline** is 24-hour service is available for young people (aged five to 25) who need advice, counselling or just someone to talk to – no problem is too big or too small. Phone **1800 551 800 (24/7).**

• **ReachOut** is an online mental health service for young people. It provides practical support to help young people manage any issues they might face, from everyday struggles to much tougher situations.

• **Conversations Matter** is an online resource that encourages and guides the user through conducting a safe and effective discussion about suicide both in a one-on-one situation and in the community.

FAMILY VIOLENCE SUPPORT SERVICES

• **Safe Steps** is Victoria’s state-wide access point for those who need support or access emergency crisis accommodation. Phone **1800 015 188 (24/7).**

• **1800RESPECT** is the national sexual assault, domestic and family violence confidential counselling service available 24 hours a day, seven days a week. Phone **1800 737 732 (24/7),** or through **online chat service** (24/7).

• The **Men’s Referral Service** is a free, confidential telephone helpline that offers counselling, advice and support to men who have anger, relationship or parenting issues. The service also provides help to women (or other family members) who are experiencing violence or controlling behaviour by men. Phone **1300 766 491 (24/7).**

• **MensLine Australia** offers telephone, online chat and video counselling for men with family and relationship concerns. Phone **1300 789 978 (24/7).**

• **Sexual Assault Crisis Line** is a Victorian state-wide, after-hours, confidential, telephone crisis counselling service for people who have experienced both past and recent sexual assault. Phone **1800 806 292 (24/7).**

• **WithRespect** provides resources, support and advice for LGBTIQ+ people of all ages and their families experiencing difficulty in their relationships, including family violence. Phone 1800 542 847 (9am to 5pm Monday to Friday, and after hours support until 11pm each Wednesday, 10am to 10pm on Saturday and Sundays).

• **InTouch** is a state-wide specialist family violence service that works with women from migrant and refugee backgrounds, their families and their communities in Victoria. Phone **1800 755 988 (9am to 5pm Monday to Friday).**

• **Yarning SafeNStrong** is a free and confidential phone crisis line for Aboriginal people and families who need to have a yarn with someone about their wellbeing. Phone **1800 959 563 (24/7).**

• **Djirra** provides both telephone and face to face legal and non-legal support to Aboriginal people who are experiencing or have experienced family violence. Phone **1800 105 303 (Mon-Friday, 9am-5pm).**
METHODS

Data from March 2019 to July 2020 from the Victorian Emergency Minimum Dataset (VEMD), which holds deidentified clinical records of presentations at Victorian public hospitals with designated 24-hour emergency departments, were used to compile this bulletin.

The focus of this Ebulletin is on the latest available data (July 2020) to show the changes in injury profiles since the coronavirus pandemic; data from the same month last year (July 2019) are used as comparison.

The changes in injury-related ED presentations are calculated proportional to other ED presentations that are unlikely to be directly affected by the pandemic. This is to account for health service attendance level changes.

EMERGENCY DEPARTMENT HEALTH SERVICE UTILISATION

ED presentations overall (not limited to injury) were selected to generate statistics on health service use overall during the March 2019 to July 2020 period. Only ED presentations that were ‘emergency presentations’ were included: this excludes planned return visits, pre-arranged admissions and those who were dead on arrival. Rates per 100,000 population were calculated; the denominators used for calculating rates were 2018 – 2019 population estimates from the Australian Bureau of Statistics (ABS). Metropolitan and regional areas were determined based on Local Government Area (LGA) of the patients’ residence, and these were matched with ABS population data stratified by LGA and similarly grouped into metropolitan and regional areas. Age-standardisation of rates was carried out using 5-year age groups and the direct method. The standard population used was the Victorian resident population in 2001.

For VEMD caseload calculations, only ED presentations that were considered unlikely to be directly or indirectly related to the pandemic were included.

ED presentations with a first diagnosis code in:

- Certain infectious and parasitic diseases (a00-a99; all b codes excluded)
- Neoplasms (c00–d48);
- Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism (d50–d89);
- Endocrine, nutritional and metabolic diseases (e00–e89);
- Mental and behavioural disorders (f00–f99);
- Diseases of the nervous system (g00–g99);
- Diseases of the eye and adnexa (h00–h59);
- Diseases of the ear and mastoid process (h60–h95);
- Diseases of the circulatory system (i00–i99);
- Diseases of the digestive system (k00–k93);
- Diseases of the skin and subcutaneous tissue (l00–l99);
- Diseases of the musculoskeletal system and connective tissue (m00–m99);
- Diseases of the genitourinary system (n00–n99);
- Pregnancy, childbirth and the puerperium (o00–o99);
- Certain conditions originating in the perinatal period (p00–p96);
- Congenital malformations, deformations and chromosomal abnormalities (q00–q99).
INJURY CASE SELECTION

ED presentations related to injury were selected only if the first occurring diagnosis code was a community injury (i.e., an ICD-10-AM code in the range of “S00” - “T75” or “T79”); this does not include medical injuries. Episode selection was limited to incidents (i.e., excludes return visits, pre-arranged admissions). For more information on methods used by the Victorian Injury Surveillance Unit see here and background information and pre-COVID statistics see here.

Unintentional injury cases were those with a ‘Human intent’ code “1” (non-intentional harm). Unintentional home injury cases were unintentional injury cases with a ‘Place where injury occurred’ code “H” (Home). Do-It-Yourself (DIY) injuries were extracted from unintentional home injury cases if the ‘Description of injury event’ variable, which is a short narrative of the incident, mentioned terms relevant to DIY injuries. Examples of terms were those related to the use of power tools (grinders, saws, drills), lawn mowers, hand or table saws, ladders, welding equipment, nail guns or phrase indicating falls from roofs and trees. Cases with an “Activity when injured” code “W” (Working for income) were excluded. Unintentional farm injuries were unintentional injury cases with a ‘Place where injury occurred’ code “F” (Farm).

Transport injury cases were those with ‘Injury cause’ codes “1” through “8” (related to motor vehicle occupants, motor cyclists, pedal cyclists, pedestrians and other transport related circumstances), excluding “7” (Horse related (fall from, struck or bitten by)).

Self-harm injury cases were those with a ‘Human intent’ code “2” (intentional self-harm code for ED presentations in the 2018/19 financial year) and “18” through “20” (intentional self-harm codes for ED presentations in the 2019/20 financial year).

Assault injury cases were those with ‘Human intent’ codes “12” through “17” (codes related to sexual assaults, and neglect/maltreatment/assaults, by a current or former intimate partner, other family member or other/unknown persons). Additional cases were selected if the ‘Description of injury event’ text field contained terms such as “domestic”, “home” appearing with terms such as “violence”, “hit” etc., and “assault”, “hit”, “struck”, “punch” and other similar terms appearing with terms such as “partner”, “spouse” and other terms for family members. Cases selected using text searches were manually checked for relevance. Assault cases were contained to those with a ‘Place where injury occurred’ code “H” (Home).

KEY DATES REGARDING RESTRICTIONS IN VICTORIA*

<table>
<thead>
<tr>
<th>Starting date</th>
<th>Area affected</th>
<th>Level</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 March</td>
<td>Australia</td>
<td>Travel ban</td>
<td>A general travel ban, with limited exceptions, on non-citizens and non-residents travelling to Australia and Australians travelling overseas was introduced</td>
</tr>
<tr>
<td>22 March</td>
<td>Victoria</td>
<td>Restriction on non-essential services</td>
<td>Mandatory closure of non-essential services</td>
</tr>
<tr>
<td>23 March</td>
<td>Australia</td>
<td>Restrictions on gathering</td>
<td>Closure of places of social gathering, including registered and licensed clubs, licensed premises in hotels and bars, entertainment venues</td>
</tr>
<tr>
<td>Starting date</td>
<td>Area affected</td>
<td>Level</td>
<td>Implications</td>
</tr>
<tr>
<td>---------------</td>
<td>---------------</td>
<td>-------</td>
<td>--------------</td>
</tr>
</tbody>
</table>
| 29 March      | Australia     | Restrictions on gathering and movement | Public gatherings will be limited to two people  
Four acceptable reasons for Australians to leave their houses: shopping for essentials; for medical or compassionate needs; exercise in compliance with the public gathering restriction of two people; and for work or education purposes |
| 22 June       | Victoria      | Restrictions on gathering | Households can once again only have five visitors; and most easing of restrictions that were to take place were postponed |
| 1 July        | Victorian postcodes: 3012, 3021, 3032, 3038, 3042, 3046, 3047, 3055, 3060, 3064 | Stage 3 Stay at Home restrictions | If you live in one of the listed suburbs, there are only 4 reasons to leave home: shopping for food and supplies; care and caregiving; exercise; study and work – if you can’t do it from home |
| 4 July        | A further two Victorian postcodes: 3031, 3051 | Stage 3 Stay at Home restrictions | If you live in one of the listed suburbs, there are only 4 reasons to leave home: shopping for food and supplies; care and caregiving; exercise; study and work – if you can’t do it from home |
| 8 July        | Metropolitan Melbourne and Mitchell Shire | Stage 3 Stay at Home restrictions | If you live in the affected areas, there are only 4 reasons to leave home: shopping for food and supplies; medical care and caregiving; exercise and recreation; study and work – if you can’t do it from home |
| 22 July       | Metropolitan Melbourne and Mitchell Shire | Face covering | You must wear a face covering when you leave your home |
| 30 July       | Greater Geelong, Surf Coast, Moorabool, Golden Plains, Colac Otway, Borough of Queenscliffe | Restrictions on gathering | You will no longer be able to have visitors at home or visit other people’s homes |

*For more details visit:  
COVID-19 Monthly Bulletins are prepared by the team at VISU

First row (left to right): Veula Stathaki, Jane Hayman, Isabelle Bernard-Giass (Director), Dr. Uppard, Angelo D’Ili
Second row (left to right): Samantha Bulley, Tharanga Fernando, Himaal Singh, Ehsan Rassaz Dari, Le Pham

Contact VISU at:

MUARC - Monash University Accident Research Centre
Building 70, 21 Alliance Lane
Monash University
Clayton Campus
Victoria, 3800
Phone: (03) 9905 1805
Email: visu.enquire@monash.edu
Web: www.monash.edu/muarc/visu

The Victorian Injury Surveillance Unit (VISU) is a unit within the Monash University Accident Research Centre (MUARC). VISU is supported by the Victorian Government.